THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

June 09, 2003

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: *60/376,923*
FILING DATE: *May 01, 2002*
RELATED PCT APPLICATION NUMBER: *PCT/US03/13745*

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS
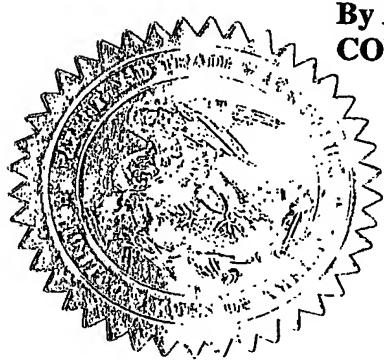
H. L. JACKSON
Certifying Officer

PRIORITY DOCUMENT
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH
RULE 17.1(a) OR (b)

05-02-02

NK

AIPA

PROVISIONAL APPLICATION FOR PATENT COVER SHEET
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. EL855713657US

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Brandon Lee	Hudgeons	Austin, TX
Marcus Adam	Shaftel	Austin, TX
Julia	Heard	Austin, TX

[✓] Additional inventors are being named on the __1__ separately numbered sheets attached hereto

TITLE OF THE INVENTION (500 characters max)

INTERACTIVE MULTI-MEDIA SYSTEM

CORRESPONDENCE ADDRESS

Direct all correspondence to:

[✓] Customer Number   27412

Type Customer Number here

OR

→ Place Customer Number Bar Code Label here

[ ] Firm or Individual Name

Address

Address

City		State		ZIP	
Country		Telephone		Fax	

ENCLOSED APPLICATION PARTS (check all that apply)

[✓] Specification   *Number of Pages*   33

[✓] Drawing(s)   *Number of Sheets*   13

[ ] Application Data Sheet. See 37 CFR 1.76

[ ] CD(s), Number

[✓] Other (specify)   Return Receipt Postcard

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT

FILING FEE AMOUNT ($)

[ ] Applicant claims small entity status. See 37 CFR 1.27.

[ ] A check or money order is enclosed to cover the filing fees

[ ] The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:

[ ] Payment by credit card. Form PTO-2038 is attached.

$80.00

The Invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

[ ] No.

[ ] Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,

SIGNATURE _____   Date   05-01-02

TYPED or PRINTED NAME   David O. Simmons

TELEPHONE   512-306-8533

REGISTRATION NO. (if appropriate)   43,124

Docket Number: Hudgeon:.05

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

PROVISIONAL APPLICATION COVER SHEET
Additional Page

Docket Number	

INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign Country)
Jefferson Blake	West	Austin, TX
Christopher	Cavello	Austin, TX

Number __2__ of __2__

WARNING: Information on this form may become public. Credit card Information should not be included on this form. Provide credit card information and authorization on PTO-2038.
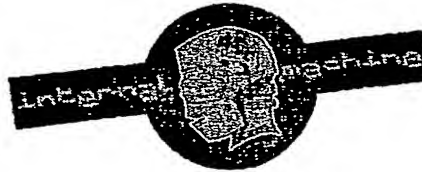
Internal Machine Industries

Technology Summary: Frequency 31 Interactive Engine

The Frequency 31 Interactive Engine is the name of the Internal Machine's interactive multimedia platform. It consists of the Console, the Base Station, the Audience Controls and Internet Server Software. Designers create experiences for the Frequency 31 Interactive Engine using a developer's kit provided by Internal Machine. The technology and its innovations are and will continue to be protected to the fullest extent by intellectual property laws.

Console

The heart of the Frequency 31 Interactive Engine is the Experience Console. The Console consists of a customized rackmount server equipped with the Frequency 31 code. In a theater, the Console would be placed in the projection booth where it would be connected to the theater's projection system. It is capable of serving DVD-quality video and full Dolby surround sound audio via the theater's digital projector and theater sound system. In addition, it locally stores and retrieves all interactive media assets, like movie, sound and animation files. It is capable of displaying all major media types (mp3, mpeg video, avi, QuickTime, Flash, etc).

The Frequency 31 software residing on the console interprets Frequency 31 Interactive Definition (.f31) files that specify how video, text and animation should react to real-time audience participation. The Console communicates with the Base Station to gather audience responses and integrate those responses into the presentation. The Console also tracks and saves audience responses so they can be included in reports, used to improve experiences, or uploaded to scoreboards or databases on the Internet Server. Finally, the Console connects to venue point-of-sale (POS) systems, allowing concession ordering via controllers, as well as to theater automated lighting systems to automatically dim and raise lights.

4/25/2002

Base Station and Audience Controls

The Base Station connects to the Console and collects responses from the Audience Controls. The Base Station and the Audience Controls are Internal Machine-created hardware solutions for audience response. Each Console/Base Station pair will support up to 500 audience controls, making the solution scalable to very large venues.

Shown here are design sketches for the theater chair-integrated controls that will be installed in the Alamo Drafthouse Theater. The flexible technology will also be implemented as handheld units for disabled patrons who are seated in wheelchairs. In addition, application-specific controls (for a business presentation, for example) can be created using the same technology. Finally, an accessory jack in each control allows the addition of other, unique audience tracking and response hardware in the future.

Internet Server Software
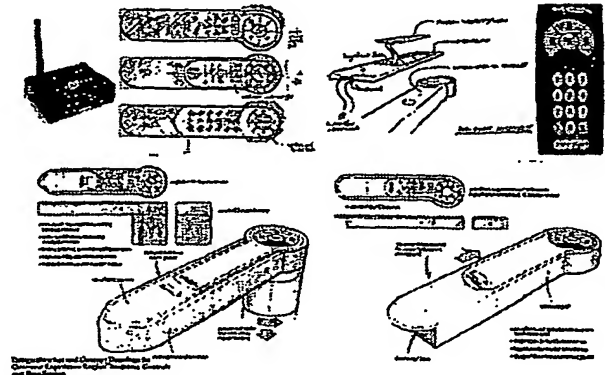
The Frequency 31 Internet Server Software runs on Internal Machine's server and provides a secure online link to the Console. The Internet Server will host experience-related web sites, like www.iquestionauthority.com, where game players can register for the game, view past scores and compare results with other players. For business applications, the Internet Server allows users to securely upload PowerPoint and multimedia files, add interactive quizzes and polls to business presentations and preview and verify presentation contents. Businesses and education users can also view and print reports on quiz scores and poll results. Experience designers can even request that users visit the Internet Server to RSVP, or assign seats to guests online. The Internet Server is based on J2EE technology, making it the perfect place to interface with existing, legacy databases, other online applications, or e-commerce engines.

4/25/2002

Experience Developer's API

An important aspect of Internal Machine's technology strategy is the development, maintenance and extension of the Experience Developer's Application Programming Interface (API). The API is the set of specifications, instructions and tools that designers use to create an experience for the Frequency 31 Interactive Engine.

The Experience Developer's API ensures that designers unfamiliar with computer programming can create Frequency 31 Interactive Experiences with tools they find familiar and easy to use. For example, Question Authority is being designed by a team of multimedia artists and animators using their own, familiar tools along with those provided by Internal Machine. A businessperson creating a presentation could do so in Powerpoint, add interactivity with easy-to-use online tools, and never see a line of code.

The

```
Source Editor [TVShow]
<QUESTION
        questionAudio="HC_Tvs02_Qu_TI.wav"
        answerAudio="HC_Tvs02_An_TI.wav">
        <QUESTIONTEXT>In Addams Family Values, what is the name of the new Addams baby?</QUESTIONTEXT>
        <ANSWER>Motley</ANSWER>
        <ANSWER>Wednesday</ANSWER>
        <ANSWER>Pugsley</ANSWER>
        <ANSWER correct="true">Pubert</ANSWER>
</QUESTION>
<QUESTION
        questionAudio="HC_Tvs03_Qu_TI.wav"
        answerAudio="HC_Tvs03_An_TI.wav">
        <QUESTIONTEXT>Who played Pearl Slaghoople in The Flintstones movie?</QUESTIONTEXT>
        <ANSWER>Brittney Spears</ANSWER>
        <ANSWER>Rosie O'Donnell</ANSWER>
        <ANSWER>Meg Ryan</ANSWER>
        <ANSWER correct="true">Elizabeth Taylor</ANSWER>
</QUESTION>
<QUESTION
        questionAudio="HC_Tvs04_Qu_TI.wav"
        answerAudio="HC_Tvs04_An_TI.wav">
        <QUESTIONTEXT>In Star Trek III, what restricted planet does Kirk have to visit to find Spock
        <ANSWER>Ceramathon</ANSWER>
        <ANSWER correct="true">Genesis</ANSWER>
        <ANSWER>Krypton</ANSWER>
        <ANSWER>Earth</ANSWER>
</QUESTION>
<QUESTION
        questionAudio="HC_Tvs05_Qu_TI.wav"
        answerAudio="HC_Tvs05_An_TI.wav">
        <QUESTIONTEXT>What is Garth's last name in Wayne's World?</QUESTIONTEXT>
        <ANSWER>Garthalemew</ANSWER>
        <ANSWER>Altoid</ANSWER>
        <ANSWER correct="true">Algar</ANSWER>
        <ANSWER>Rothfus</ANSWER>
```

image above shows an excerpt of an .f31, or Frequency 31 Definition, file. For complex games like

4/25/2002

Question Authority, designers use the .f31 language to specify the different aspects of how the game's animated characters should behave and react to the audience. Much like XML, the .f31 format is easy and familiar to anyone who has used HTML.

Other Technology Facts

- All console and server-side software is 100% pure Java and can be easily ported to all major OS platforms.

- Frequency 31 implements its own HTTP server to handle communication between components. This means that multi-location gaming and heterogeneous input devices can be used. Integration with other components is as simple as implementing a set of HTTP calls. Sockets can be easily secured and encrypted for sensitive applications.

- The audience input devices can be wireless and battery powered, or they can be hard-wired. Wireless installation is much faster and easier, and input devices can be mobile; the hard-wired solution reduces cost.

4

4/25/2002

Internal Machine Industries, Inc.: Intellectual Property Summary

Frequency 31: General Description

Internal Machine Industries, Inc. ("Internal Machine") has designed an interactive multimedia system called the Frequency 31 Interactive Engine ("Frequency 31"). An "interactive multimedia system" is an integrated combination of hardware and software that has at least these three components: a display capable of showing multimedia assets, an input device (or devices) that allow interaction, and an application programmer's interface (API) that allows interactive multimedia designers to design interactive presentations, such as games, business presentations, educational presentations, etc. Some systems also have the capability of allowing installation-to-installation communication, allowing distributed gaming. Finally, some systems have the ability to act as point-of-sale systems by facilitating product orders.

What is unique about Internal Machine's interactive multimedia system is that it is designed for a situation when there is one large display or a small number of large displays shared by many interactive users. Specifically, Frequency 31 is designed to operate in a large gathering of people who are looking at one or a few large displays, like a theater. In addition, Frequency 31 is designed to accommodate many interactive devices simultaneously. Finally, Frequency31 is the only platform of its kind whose design and API specifically allow point-of-sale capabilities and inter-installation communication.

Below is a list of interactive multimedia systems and a description of how it differs from Frequency 31:

Computer

A computer has a single small display, supports one (or at most two or three) simultaneous interactive inputs, and supports several multimedia APIs. Users can also use the computer to order products, and can use the internet for installation-to-installation communication.

Traditional Gaming Console (Xbox or Playstation)

A gaming console has a single small display, supports up to four simultaneous interactive inputs, and supports one specific, very high-quality multimedia API. Gaming consoles support installation-to-installation communication and are beginning to support product orders.

Bar Interactive Systems / Traditional "Audience Response" Technology

These systems, as they exist now, are not integrated "interactive multimedia systems" as defined here. The installations consist of hardware systems like Fleetwood's Reply products (http://www.replysystems.com/) in combination with certain software packages

that are designed either to allow rudimentary presentations (like "Digital Professor" at http://www.advancedsp.com/products/dp4kpds/index.html) or are "one time" application programs (like Buzztime's http://www.buzztime.com/). There is no hardware/software combined platform for these systems, so there is no multimedia API. Installation-to-installation communication and point-of-sale capability is only available if the specific software allows it (it is not a part of the API).

Frequency 31

Frequency 31 is an integrated hardware/software solution designed to run on a single large display or on a set of large displays, supports anywhere from 100 to thousands of simultaneous interactive inputs, and includes a high-quality multimedia API. Frequency 31 also supports ordering capability and inter-installation communication.

Hardware

Console

Each installation of Frequency 31 includes a single console, usually placed close to the display technology (e.g., in the projection booth of a theater). The console houses all of the multimedia display assets and technology. The console also accepts, interprets and processes input from interactive devices in the audience. Finally, the console interfaces with other important systems in the installation atmosphere (like lighting systems, point of sale systems, etc.).

The console's hardware consists of a standard computer. The software consists of a standard operating system and the Frequency 31 console software (see below).

Communications between the console and the other hardware devices are addressed in the final section of this document.

Control Devices

Unlike other interactive devices, Frequency 31 controllers integrate directly into the environment. Frequency 31 controllers are shaped like, and take the place of, a traditional theater seat armrest. Each console supports anywhere from 100 to thousands of interactive audience devices. Concept photographs of the control device are below. Note that the device has integrated interactive, information entry, order request capability, and individual user feedback functionality.

Each control device has an "expansion jack" which allows an additional input device (like a special-purpose keypad, keyboard or joystick) to be plugged into the system. The additional input device can use the power and communications circuitry of the original device, thus cutting the size, cost and complexity of the additional device.

Both the wired and wireless versions of the Frequency 31 controller consist of a keypad connected via a cable to an electronics PCB. The keypad includes lights that can be triggered to supply user feedback. The PCB contains a microcontroller running keypad

scanning and communications software, power regulation components and signal processing components.

Design Sketches and Concept Drawings for
Converse Experience Engine Audience Controls
and Base Station

Wired Version

In the wired version, each contiguous seat is connected to a communication bus that contains both a power supply and the communications media for the device. This communication bus is connected to a "signal box" at the end of the row (see below for description of signal box) which relays signals to the base station (see below).

Wireless Version

In addition to the other PCB components, the wireless version includes a wireless receiver/transmitter pair, software to drive the pair, circuitry to process signals for the pair and switching circuitry. The wireless version also has a battery to supply power. The receiver/transmitter pair communicates with the base station (see below).

Other "Signaling" Hardware

Each set of contiguous seats in a theater or venue may be outfitted with a signal box. The signal box serves two purposes. First, if the theater uses wired devices, the signal box collects input from its connected seats and forwards them to the base station. Second, the signal box has lights that notify wait staff of the location of a seat that has requested an order or service.

Base Station

Each Frequency 31 installation has at least one base station that gathers input from the devices in the audiences and forwards them to the console. Since a theater may contain a mix of wired and wireless devices, and since multiple base stations can be attached to a console, allowing larger numbers of devices per console, a single console may have many base stations. Each base station interfaces with the computer via a common communications port (serial or USB).

Wired Version

The base station for the wired version includes two subcomponents: communications and power. The communications component consists of a signal level adjustment circuit to accommodate the different power levels for communication required by the console and the signal boxes and devices. The power circuit consists of a power transformer to convert commonly available electricity levels (e.g. 120V AC) to a low direct current (e.g. 24V DC). Both of these subcomponents connect to a common wire set (e.g. RJ45) that runs to the signal boxes and interactive devices.

Wireless Version

The base station for the wireless version includes a wireless receiver/transmitter chipset and communications circuitry that process and adjust signals. The base station may be powered by direct current from a transformer or from battery power.

Electromechanical Relay Control

A Frequency 31 installation may include devices that allow the console, via a base station, to control electromechanical relays. For example, the Frequency 31 API includes commands that allow a designer to dim or shut off theater lights or trigger effects. An electromechanical relay control can be either wired or wireless. They consist of the same components as wired or wireless interactive devices, except that they typically do not have interactive capabilities and they contain circuitry that triggers or disengages electromechanical relays based on signals from the console.

Console Software

The console, in addition to the standard operating system, contains the following components:

Interactive Presentation Specification Format Interpreter

The API that allows designers to compose interactive presentations for the Frequency 31 platform includes a specification format for an interactive presentation. The specification format is a hierarchical language that allows designers to specify specifically which multimedia assets they want to show, the timing of the display, and the way that it will respond to user input. The API supports common interactive situations like quizzes, scoreboards, voting, etc. Currently, the designer specifies an interactive presentation using an .f31 file, which is a form of XML. A sample of an .f31 file implementing a trivia game show is below:

```
<QUESTION
    questionAudio="HC_Tvs02_Qu_Tl.wav"
    answerAudio="HC_Tvs02_An_Tl.wav">
    <QUESTIONTEXT>In Addams Family Values, what is the name of the new Addams baby?</QUESTIONTEXT>
    <ANSWER>Rotley</ANSWER>
    <ANSWER>Wednesday</ANSWER>
    <ANSWER>Pugsley</ANSWER>
    <ANSWER correct="true">Pubert</ANSWER>
</QUESTION>
<QUESTION
    questionAudio="HC_Tvs03_Qu_Tl.wav"
    answerAudio="HC_Tvs03_An_Tl.wav">
    <QUESTIONTEXT>Who played Pearl Slaghoople in The Flintstones movie?</QUESTIONTEXT>
    <ANSWER>Brittney Spears</ANSWER>
    <ANSWER>Rosie O'Donnell</ANSWER>
    <ANSWER>Meg Ryan</ANSWER>
    <ANSWER correct="true">Elizabeth Taylor</ANSWER>
</QUESTION>
<QUESTION
    questionAudio="HC_Tvs04_Qu_Tl.wav"
    answerAudio="HC_Tvs04_An_Tl.wav">
    <QUESTIONTEXT>In Star Trek III, what restricted planet does Kirk have to visit to find Spoc
    <ANSWER>Carenathon</ANSWER>
    <ANSWER correct="true">Genesis</ANSWER>
    <ANSWER>Krypton</ANSWER>
    <ANSWER>Earth</ANSWER>
</QUESTION>
<QUESTION
    questionAudio="HC_Tvs05_Qu_Tl.wav"
    answerAudio="HC_Tvs05_An_Tl.wav">
    <QUESTIONTEXT>What is Garth's last name in Wayne's World?</QUESTIONTEXT>
    <ANSWER>Garthelameq</ANSWER>
    <ANSWER>Altoid</ANSWER>
    <ANSWER correct="true">Algar</ANSWER>
    <ANSWER>Rothfuq</ANSWER>
```

Multimedia Display Capabilities

The console integrates developer-defined presentations with standard multimedia file types. A developer can include any major standard multimedia files (mp3, wav, mpeg, flash, QuickTime, etc).

Distributed Component Communication

To facilitate installation, configuration and integration, the console software is organized as a set of discrete distributed components. For example, the display components need not even reside on the same machine as the components that process .f31 files or the components that handle and process interactive device messages. Communication between all of these distributed components is handled through a socket-based messaging system, meaning that the components need only be connected via a common TCP/IP-capable network in order to function as a single unit.

Point of Sale System Integration

The system can be easily integrated with any commercial point of sale system via the system's API by attaching a "communication interpreter" software module to the system in question. Thus, a message from the Frequency 31 system can be correctly interpreted and translated into a signal that can be understood by the POS's API. This makes it easy, for example, for an item ordered from the seat to be automatically be added to the audience member's bill.

Other Automated System Integration

Frequency 31 facilitates integration to other automated systems by translating Frequency 31 messages as needed. For example, an automated lighting system that uses the MIDI show control protocol can be controlled via Frequency 31, giving interactive experience designers the ability to synchronize light effects with interactive presentations.

Communications between Console and Other Hardware

This section describes how the console communicates with the other hardware (most importantly, the control devices).

Address

Each device has a unique hierarchical address consisting of these parts:

- Device type (1 byte)

- Device version (1 byte)

- Device ID (2 bytes)

The hierarchical nature of the address ensures that (a) the console can distinguish between different types and versions of devices and firmware based on address, and (b) enough address space is available for thousands of devices (device types and versions can be "grouped").

Wired Version

General Description

Packet Format

Address

Response Mechanisms

Internal Machine Industries, Inc.

Frequency 31 Interactive Engine	4/23/2002	Block Diagram

POS System

Service Request Displays

Multimedia Projection System

Projection Booth Controls

F31 Experience Definition Files

Multimedia Files

Gaming Engine

F31 Socket Communication

Front End Components (Element Applets, System Codecs and Browser Plug-In/Control Software)

F31 Socket Communication

F31 Socket Communication

F31 Socket Communication

F31 Socket Communication

F31 Socket Communication

Local Area Network

Response Database

Response Recording Components (including Scoreboards)

F31 Socket Communication

Interactive Device Input Processor

Other Gaming Engines, Remote Administration and Control Components, Web Gaming Components, Remote Reporting Components

Wireless Base Station

Wired Base Station

Wireless Interactive Devices

Relay Point

Relay Point

Wired Interactive Devices

Wired Interactive Devices

Internal Machine Industries

Appendix B

Advertising Research

The Advertising Problems We Solve

Problem: Unengaging Advertising

The first goal of advertising is to engage its audience's attention so the advertising message can be delivered. Any form of advertising that breaks from its primary message to deliver advertising (" . . . and now a word from our sponsor . . .") loses some portion of the audience in the process. Our eyes are trained to ignore newspaper advertisements and Internet banner adds; we are likely to ignore the radio or television (or change the channel) during commercial breaks, and most direct mail advertising and coupons end up in the trash.

The problem is even worse if the original medium doesn't have the audience's full attention to begin with. Radio is very unlikely to have the full attention of its audience; most radio is consumed in vehicles, workplaces and as background music in homes. According to MRI, which measures television viewer attentiveness, not even two-thirds of the viewers of television's most popular shows report paying "full attention" to the programming. A 1993 survey by the Roper Organization showed that those actually watching the television commercials represent even a far smaller number — only 22% of adults reported that they actually watch television commercials:

4/25/2002

Exhibit III: Percent of Adults Who Report They Often Respond to Television Commercials in Selected Ways

Solution: Captive Audience

Question Authority delivers a truly captive audience. Pre-movie audiences are open to entertaining experiences and have no choice but to pay attention to the huge screen that faces them. In addition, advertising will be completely integrated with the gaming experience. There will be no break or distinction between advertising and non-advertising content. Non-advertising trivia questions will show visual and audible advertising during wait periods. Some trivia questions will have advertising as their goal (for example, a question about a product or company); correct answers to these questions will "count" toward the game's scores and prizes, so audience members are likely to continue to participate.

Question Authority will maximize the percentage of the audience that will be engaged by the advertising, thus increasing response rates.

Problem: Passive Audience

Audience involvement has been widely recognized as a means for improving advertising effectiveness.[1] An active, involved consumer is much more open to persuasion than a passive,

---

[1] Stewart, D.W. and S. Ward (1994), "Media Effects on Advertising," in J. Bryant and D. Zillmann (Eds.), Media Effects: Advances in Theory and Research, Hillsdale, N. J.: Lawrence Erlbaum Associates, Inc., pp. 315-363.

4/25/2002

uninvolved consumer. Often, passive advertising is referred to as "lean-back" advertising, and active advertising as "lean-forward." Some advertising and marketing companies even use an "Ad Involvement Metric" to measure the level of advertising involvement.[2]

Television and radio are classic examples of passive advertising media. Advertisers using these media have to result to humor or shock to raise involvement levels; often, the advertising message is lost or diluted in the process. Current cinema advertising, consisting of slide shows of static advertising, is a hopelessly passive method of advertising.

Frequency 31 Solution: Active Audience

Much of the effectiveness of rich media online advertising is attributed to its status as a "lean-forward," active involvement medium: "It is 12-18 inches away from the audience, and requires the viewer to be actively engaged and attentive to the medium in order to consume it. This engaged state helps provide higher attention to on-line advertising."[3] A study by MBInteractive explained the advantage:[4]

> We believe that much of the success of online advertising to date has been based on the nature of the medium and the context in which the ad is viewed, not the advertising itself. We argue that the interactive nature of the Web, coupled with the strong ability of streaming ad copy to actively involve viewers, means that streaming ads have the potential to outperform Television advertising.
>
> How people process media dictates the likely initial level of involvement with advertising presented in that medium. We can identify several different levels of involvement which can help us understand the degree to which advertising must gain attention rather than receive attention as part of the medium. There are five main levels that we need to consider.

Level	Degree of Involvement
Pre-Processing	Weakest
Divided Processing	
Passive Processing	
Active Processing	
Interactive Processing	Strongest

> With pre-processing, the focus is something other than the medium. Attention needs to be caught and held for long enough to deliver an impression. For instance, when driving a car, the driver is initially in a pre-processing mode, hopefully focusing on the road, traffic signals and other automobiles. When the driver catches sight of a billboard at the roadside, the result is divided processing, part of their mind is still busy controlling the car while the rest is devoted to trying to understand the billboard. The

---

[2] See Intelliquest (www.intelliquest.com).

[3] This quote has been plagiarized so often among Internet advertisers that it is difficult to trace its true source.

[4] http://www.mbinteractive.com/resources/reports/streaming_media.html

4/25/2002

involvement may then become active, if they succeed in assimilating the content of the billboard. In this context, however, the advertising must actually gain some level of attention before it can be processed more deeply.

Some media might start with divided processing, for instance, ironing and listening to the radio. The radio is background to the main task of ironing, but the message is still passively processed at some level. The advantage of radio is that ads are heard through, since the listener is still performing the main task. They are unlikely to change channel or stop listening simply because the ads have come on. Provided the ad can gain more than passing attention, people may then end up listening to advertising for brands or product categories to which they might not otherwise have done.

Television is generally a passive medium. People watch television to be entertained or informed and the content is presented, or broadcasted, to the viewer. Involvement can become active when viewers engage in "channel surfing"—switching from channel to channel to find a desired program. However, once the viewer settles on a program, viewing takes on a passive nature, as viewers "lean back" and enjoy (and/or do other activities while) the show that is being broadcast to them.

With TV, ads are interspersed in the content on a sequential basis. Unless a decision is taken to do something else during the ad break, people end up viewing the commercials. They may not be actively interested in what is shown or said but a 'watching brief' is maintained which can lead to active primary processing if the copy is involving or stimulating enough. Again, the advantage is that there is little screening involved. Even brands in categories not considered relevant by the viewer may succeed in delivering an impression, simply because they stimulated a more active level of attention in some way. Viewers may choose to reject a message that they do not believe or agree with while viewing an ad. However, they will have been exposed to it, and furthermore, the act of rejection may make the ad more memorable. ...

Few media extend to active interaction, the final level of processing and the deepest. Three media deliver this depth of processing on a regular basis. These are the Web, direct mail and yellow pages. With the Web, clickthrough initiates that further interaction. Our test data suggests that the act of clickthrough may add little to the recall of seeing the brand advertised, but it does deliver more depth to the experience.

(emphasis added) Question Authority combines the advertising message with physical and emotional audience participation. Audience users will press buttons in response to challenging questions in order to win on-screen recognition and prizes. In addition, Question Authority will spur active participation with free prizes for winners and games that stress competitive and team involvement.

In this way, Question Authority takes the advertising advantage of active interaction to a new level, ensuring that each advertisement reaches the "active interaction" level of processing for a high percentage of the audience, thus increasing advertising effectiveness.

Problem: Uninterested Audience

Once advertising has the active attention of the audience, it must take advantage of that attention by holding and maximizing the audience's interest. The eye is drawn to motion, and the ear is drawn to sound; both of these are important ways of keeping an audience's mental interest in the advertising. A study by Morgan Stanley Dean Witter showed that advertising using rich media (using video or motion graphics and sound) is five times more effective than static advertising, either in print or on the Internet.

Current cinema advertising is static (slide shows), and a different company (the largest is Theater Radio Network, now a division of Distributed Media Corporation) often sells audio advertising that is not in sync with the visual advertising.

4

Frequency 31 Solution: Rich Media

Question Authority will be the ultimate in rich media advertising. Question Authority will make full use of the entire cinema movie screen and will allow full motion, DVD-quality graphics and video. In addition, Question Authority will take advantage of the high-quality cinema surround-sound system.

Problem: Single-Vehicle, Single-Campaign Advertising "Silos"

Most advertising is "single-vehicle, single-campaign," meaning that it is a one-time communication to a customer using a single advertising vehicle. Making the jump to multiple-campaign advertising, where you send the advertising message to the same prospect several times, greatly increases marketing effectiveness. When you deliver those multiple advertising messages via different advertising vehicles, the advertising is even more powerful. An advertising study explained the effect:[5]

> This movement has been variously called integrated marketing communications (IMC), integrated direct marketing (IDM), and maximarketing.

> How can different communication tools be integrated in campaign planning? Imagine a marketer using a single tool in a "one-shot" effort to reach and sell a prospect. An example of a single-vehicle, single-stage campaign is a one-time mailing offering a cookware item. A single-vehicle, multiple-stage campaign would involve successive mailings to the same prospect. Magazine publishers, for example, send about four renewal notices to a household before giving up. A more powerful approach is the multiple-vehicle, multiple-stage campaign. Consider the following sequence:

> News campaign about a new product —>Paid ad with a response mechanism —>Direct mail —>Outbound telemarketing —>Face-to-face sales call —>Ongoing communication

> For example, Compaq might launch a new laptop computer by first arranging news stories to stir interest. Then Compaq might place full-page ads offering a free booklet on "How to Buy a Computer." Compaq would then mail the booklet to those who responded, along with an offer to sell the new computer at a special discount before it arrives in retail stores. Suppose 4 percent of those who receive the booklet order the computer. Compaq telemarketers then phone the 96 percent who did not buy to remind them of the offer. Suppose another 6 percent now order the computer. Those who do not place an order are offered a face-to-face sales call or demonstration in a local retail store. Even if the prospect is not ready to buy, there is ongoing communication. Eman Roman says that the use of response compression, whereby multiple media are deployed within a tightly defined time frame, increases message reach and impact. The underlying idea is to deploy a sequence of messages with precise timing intervals in the hope of generating incremental sales and profits that exceed the costs involved. Roman cites a Citicorp campaign to market home equity loans. Instead of using only "mail plus an 800 number," Citicorp used "mail plus coupon plus 800 number plus outbound telemarketing plus print advertising." Although the second campaign was more expensive, it resulted in a 15 percent increase in the number of new accounts compared with direct mail alone. Roman concluded:

>> When a mailing piece which might generate a 2% response on its own is supplemented by a toll-free 800-number ordering channel, we regularly see response rise by 50-125%. A skillfully integrated outbound telemarketing effort can add another 500% lift in response. Suddenly our 2% response has grown to 13% or more by adding interactive marketing channels to a "business as usual" mailing. The dollars and cents involved in adding media to the integrated media mix is normally marginal on a cost-per-order basis because of the high level of responses generated. Adding media to a marketing program will raise total response because different people are inclined to respond to different stimuli. Rapp and Collins's model makes direct-marketing techniques the driving force in the general marketing process.

[5] Marketing Management, Philip Kotler (Prentice Hall 1999) p. 651-52.

4/25/2002

This model recommends the creation of a customer database and advocates making direct marketing a full partner in the marketing process. Maximarketing consists of a comprehensive set of steps for reaching the prospect, making the sale, and developing the relationship. For more details, see the Marketing Insight "The 'Maximarketing' Model for Integrated Marketing." Citicorp, AT&T, IBM, Ford and American Airlines have used integrated direct marketing to build profitable relations with customers over the years.

Frequency 31 Solution: Multi-Vehicle, Multi-Campaign Advertising

An advertiser who chooses Question Authority gets a Multi-Vehicle, Multi-Campaign advertising package. In addition to the primary vehicle (pre-movie interactive multimedia game integrated advertising), advertisers can take advantage of:

- Internet advertising: Placement on the Drafthouse's Internet website (www.drafthouse.com) and on the Question Authority website (www.thequestionauthority.com, linked from the Drafthouse site).

- Physical theater advertising (posters)

- Print advertising: Advertisers will be included on the Drafthouse's printed schedules and on menus

- Question Authority customer information database: If, during registration, an audience member allows contact from advertisers, the advertiser can use this information for direct marketing.

- Email advertising: The Drafthouse sends a quarterly newsletter to its email list. Advertisers will receive placement in those emails.

Thus, a typical Drafthouse audience member will receive at least three, and as many as five or six, separate exposures to the advertising message, each via a different marketing vehicle. This will greatly increase the effectiveness and value of the advertising.

Problem: Delayed Action Opportunity

One important advantage that direct advertising often has over indirect advertising is that direct advertising offers the audience an immediate chance to act upon the advertising. That is, the advertising medium itself contains the mechanism for requesting more information or completing the transaction. Examples include pre-printed credit card applications received through the mail, the ability to respond immediately to direct telemarketing, and 800 numbers at the end of late night commercials.

The power of an immediate action opportunity, and the corresponding problem with a medium that doesn't provide such an opportunity, is demonstrated by the difference in effectiveness between FSI (Free Standing Insert) Coupons (the kind that fall out of magazines and newspapers) and POS (Point of Sale) Coupons (coupons that are distributed at the point of sale, yielding an immediate sales opportunity). A study by Morgan Stanley Dean Witter found that POS Coupons were 467% more effective than FSI Coupons, leading to a 34% decrease in average advertising cost per sale.

Frequency 31 Solution: Immediate Action and POS capability

Question Authority will have the capability of taking orders for merchandise or requests for more information directly from the experience. Advertisements for merchandise or goods that the

Drafthouse carries (food, beer, t-shirts and hats, music CDs) can be purchased immediately by indicating the desire to purchase on the keypad. The audience can also request more information about an advertised product or service immediately by indicating the desire on the keypad. This immediate action opportunity will increase advertising effectiveness.

Problem: Advertising Value is Hard to Prove

The value of most advertising media is hard to prove. Tracing a decision to purchase a good or service back to a specific advertising message or vehicle is extremely difficult, if not impossible. As a result, advertisers have no proof that a given marketing investment has been profitable.

Frequency 31 Solution: Proof of Effectiveness

As part of its customer information database, Frequency 31 will be capable of keeping detailed records about customer activity and responses. An advertiser with Question Authority will receive detailed reports about who their message is reaching and how effective the message is at generating leads and sales. Based on these reports, the advertiser can make intelligent decisions on how to improve the advertising to maximize effectiveness.

Problem: Active Negative Response

Advertising can create a positive or negative response. If the advertising or its vehicle is annoying or offensive, it can generate an active negative response. In this situation, the advertiser would have been better off not advertising at all. Damage to company and brand image from this kind of advertising can be very difficult to reverse.

Examples of bad advertising decisions that create an active negative response are common, especially in the Internet age. Misuse of customer information and "spam" email are two examples.

Cinema advertising has been executed poorly, leading to an active negative response for cinemas. Audiences are annoyed by cheaply produced, boring slide show presentations that they are forced to endure before the start of a movie. Theaters delay the beginning of a movie to cram in more advertising, and sometimes include a "trailer-like" advertisement between the movie previews and the main feature. The public response has been so bad that it has prompted Ralph Nader and Commercial Alert, a commercial culture watchdog organization, to call for the end of the advertising.[6]

Frequency 31 Solution: Honesty, Audience Respect, Independent Theater Support

Question Authority will ensure that advertisers achieve a positive advertising response in the following ways:

- All communications with the audience that involve collection of customer information will be subject to a clear information use policy. Internal Machine and the Drafthouse will constantly remind patrons that their information is secure and safe from abuse.

---

[6] See http://www.commercialalert.org/theater_ads.html.

7

4/25/2002

- Question Authority will be advertised alongside the movies that it precedes, so patrons anticipate and expect that they will be playing the game prior to the movie's start time.

- Advertisers with the Drafthouse will be celebrated as supporting local business, independent theater, and the arts by supporting the Drafthouse. We will position Drafthouse advertising as explicitly against "mainstream" advertising, and seek advertisers who want to emphasize the local appeal of their products or services.

4/25/2002
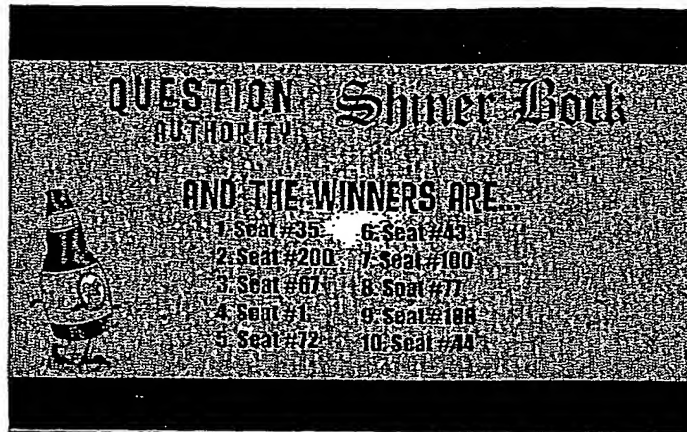
Internal Machine is creating Question Authority, the first Frequency 31 Interactive Experience. It is a 35 minute pre-movie game show designed to generate revenue from integrated advertising. Research suggests that this medium is capable of extremely effective advertising, and independent theaters are highly interested in pursuing creative revenue opportunities. Austin's Alamo Drafthouse Theater has signed a two-year commitment to show Question Authority before every movie.

It is estimated that a single screen's revenue from Question Authority will be capable of recovering the costs for the design, hardware and installation costs of Frequency 31 while covering all costs of operation. There is an immediate opportunity to expand the revenue opportunities of the single screen, as well as expand to other screens in Austin and in Texas.

Pre-Movie Game Show Entertainment

Advertising Advantages & Pricing

Appendix B lays out the research and reasoning which supports our belief that we can charge a premium for advertising.

The chart below shows how Question Authority compares with other advertising media:

4/25/2002

	Captive Audience	Rich Media	Active Participants	Positive Advertising Reaction	Immediate Sale Capability	Multi-Vehicle, Multi-Campaign	Proof of Effectiveness
Question Authority	☑	☑	☑	☑	☑	☑	☑
TV		☑					
Radio		☑					
Newspaper/ Magazine			☑				
Internet Banner Ads		☑	☑				
Internet Email			☑				
FSI Coupons			☑				☑
POS Coupons			☑	☑	☑		☑
Direct Mail			☑		☑		☑
Movie Slide Shows	☑						

These advertising advantages contribute directly to a higher sales response, and correspondingly to a lower cost per order. As a result, we believe that we can charge an average of $750 per week (or roughly a $174 CPM, or cost per 1000 impressions, assuming that each advertiser receives only one "impression")[1], per screen of advertising, and that our time limitations allow us to collect that average amount from seven advertisers.

Our Primary Customer: The Independent Cinema

The primary customer for our market entry strategy is the independent cinema[2]. Our first cinema, Austin's Alamo Drafthouse Theater, has committed to a two year contract. The Drafthouse has four more screens in Austin, and we've received interest from screens in Dallas, San Antonio and Houston. Through our market research, we've identified an initial target list of over 250 cinema companies across the United States that operate fewer than three site locations with four or fewer screens per site.

The theater industry is difficult. Unlike most other businesses, they do not control their products. Movie studios dictate what movies will show, when they will show, and for how long. Also, they do

---

[1] This CPM measurement is for conservative comparison purposes only. According to the slide show advertisers, one "impression" is a 10 second slide. Question Authority advertisers will have 210 seconds of game-integrated rich media screen time for each "impression".

[2] This outlines the initial market entry strategy only. In the section on expansion, at the end of the business plan, we discuss the fact that large deployments across multi-screen megaplex national cinema chains represent a major revenue opportunity.

4/25/2002

not make their own decisions on ticket prices; again, studios dictate ticket charges. So, theaters operate near break-even on ticket sales, and they rely on concessions, and occasionally on advertising, the only products they can control, for the bulk of their returns. Theaters, therefore, are mindful of movie quality and its effect on attendance, but focus their attention on what they can control: increasing concession sales and establishing or increasing advertising revenue.

Increases in concession returns are traditionally limited to constant testing of concession price elasticity by increasing the cost of soda and candy. With respect to advertising revenue, advertising brokers like Screenvision Cinema Network and National Cinema Network hold contracts with many theaters to provide pre-movie and in-theater advertising (slide shows and lobby displays); most large theater chains outsource advertising to SCN or NCN or one of their competitors.

Advertising brokers like NCN have ignored small, independent theaters, focusing instead on multi-impression, low-impact advertising methods with megaplex theaters. Independent theaters are experimenting with ways of controlling their economic destiny, like showing classic films and other types of presentations, such as football games (avoiding studio ties), selling expanded concessions (dinner and alcoholic beverages) and providing atmospheres where patrons are more likely to spend longer periods of time (thus increasing concession sales). Large megaplex operators have taken note of successful innovations and have begun to experiment themselves.

Question Authority brings an innovative, effective advertising revenue and increased concession sale opportunity to independent cinemas, helps them to track and take advantage of information about their customers and offers a platform for a new kind of interactive entertainment. Our first cinema, Austin's Alamo Drafthouse Cinema, signed a two-year contract for its downtown theater with Internal Machine based on these advantages.

Our Secondary Customer: The Advertiser

Internal Machine's first year business model is based entirely upon revenue from advertising. Local advertisers currently choose between local television, radio, newspaper, Internet advertising, direct mail and megaplex cinema advertising. Question Authority at the Alamo Drafthouse gives advertisers a compelling and cost-effective alternative. Specifically, Question Authority takes advantage of its unique medium to offer specific advantages over other forms of advertising that improves response rates and lowers advertising cost per sale.

The advantages of Question Authority advertising, along with our research on why these advantages lead to more effective advertising and higher sales rates, are included in Appendix B. In summary, these advantages are:

1. **Captive Audience:** Movie audiences have no choice but to look at the screen, and are highly likely (given the absence of alternatives) to play an entertaining pre-movie game.

2. **Active Audience:** Question Authority audience members are being challenged, are emotionally and intellectually involved in the game, and must physically participate by pushing keypad buttons.

3. **Rich Media:** Question Authority catches the eye with motion graphics on the theater screen and catches the ear with music and sound on the theater's surround-sound system.

4/25/2002

4. **Multi-Vehicle, Multi-Campaign:** In addition to pre-movie advertising, Question Authority gives advertisers exposure to their targets via Internet placement, email, in-store posters and printed schedules and menus. This allows advertisers to reach their targets several times via different media in a concentrated timeframe.

5. **Immediate Action Capability:** Question Authority audience members may, depending on the product or service being advertised, have the opportunity to act immediately by indicating on their keypads that they want to receive more information or purchase a product.

6. **Proof of Effectiveness:** Question Authority advertisers will have the ability to measure and report on the success of their advertising, so they can make adjustments to maximize its value. Internal Machine will provide detailed reports of advertising reach and response metrics.

7. **Positive Response to Medium:** The public finds some advertising annoying, and sometimes offensive. In the case of common megaplex pre-movie slide shows, the response from the public has been so negative that industry watchdog groups have issued public announcements denouncing the practice. Question Authority will take all necessary measures to create a positive response to its advertising, including clearly indicating show start times. During phase-one expansion into the independent cinemas, we will emphasize that advertisers are supporting the arts, independent cinema, and local businesses.

Pricing

The proposed initial average pricing for advertising on Question Authority is $750 per week.[3] Assuming an average of 3 shows per day, this equates to $26.19 per show. Assuming a conservative average attendance of 100 people per show and the minimum average impression volume of 2.5 impressions per show per advertiser, the CPM (cost per 1000 impressions) is approximately $175[4].

The chart below shows an example of an average rate card:

---

[3] We will most likely charge slightly higher for better placement/timing (e.g. at the end of the presentation, when the seats are most likely to be full), and to alter pricing between the different types of advertisers.

[4] See footnote 1.

4

4/25/2002

Average Weekly Rate Card

- Gold Sponsor Level: $1000
- Final Round Sponsor: $900
- Physical Challenges: $800
- Character Challenges: $750
- Round Sponsors (3): $600

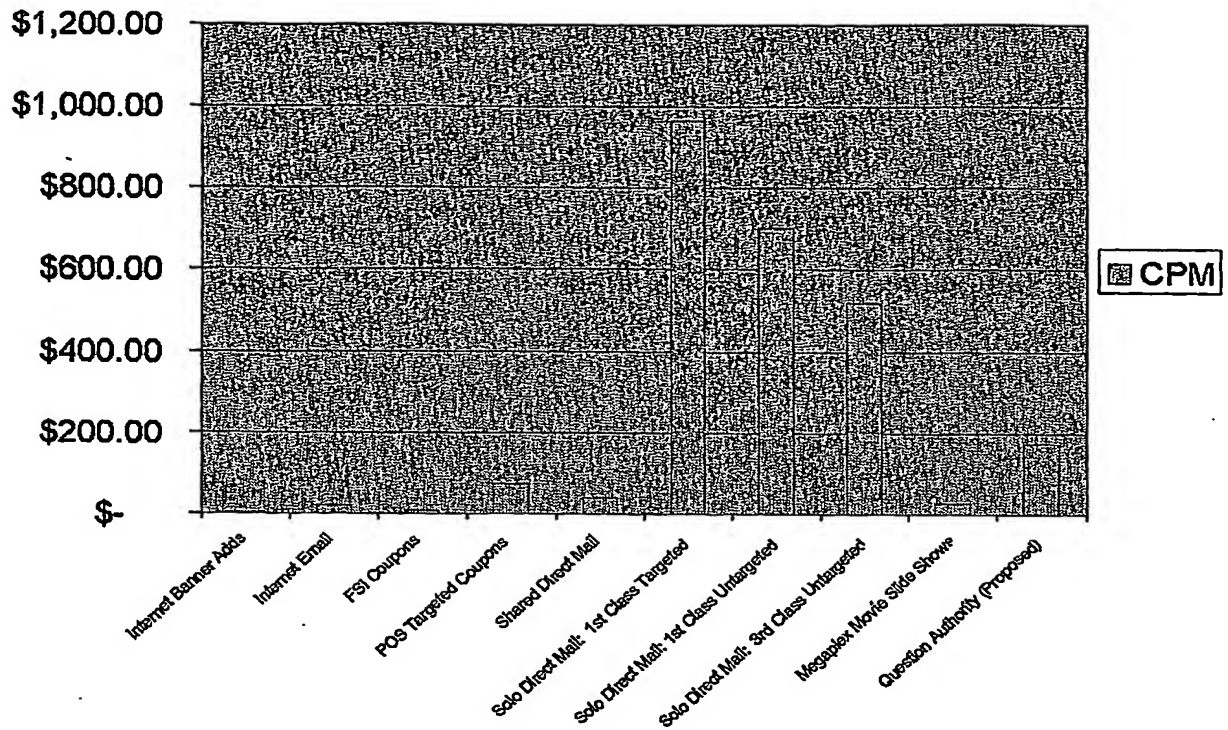**Pricing Relative to Alternatives[5]**

Question Authority has a comparable CPM to alternatives. Given its advantages compared to the alternatives, Question Authority is an attractive advertising choice at the prices quoted above.

---

[5] Direct marketing, coupons and Internet and email advertising statistics are from an advertising study by Morgan Stanley Dean Witter. Austin cinema advertising is based on quotes for advertising received directly from those organizations.

4/25/2002

Versus Internet, Direct Marketing & Coupons

CPM

Legend: ■ CPM

Y-axis values: $1,200.00, $1,000.00, $800.00, $600.00, $400.00, $200.00, $-

X-axis categories: Internet Banner Adds, Internet Email, FSI Coupons, POS Targeted Coupons, Shared Direct Mail, Solo Direct Mail: 1st Class Targeted, Solo Direct Mail: 1st Class Untargeted, Solo Direct Mail: 3rd Class Untargeted, Megaplex Movie Slide Shows, Question Authority (Proposed)

Versus Television, Radio and Print Advertising

6

The wide range of alternatives for television, radio and print advertising make calculation of a reasonable CPM estimate impossible. Conversations with experienced advertising and marketing executives have confirmed that Question Authority's pricing is reasonable, and we will continue to work with those experienced in the advertising industry to ensure that pricing and offerings remain competitive.

Opportunities for Expansion: Theaters

This initial business model assumes expansion to fifty screens. We have received interest in the service from theaters in Dallas, San Antonio and Houston, and early research has identified more than 250 independent theaters which are immediate targets for Question Authority.

Once the viability of the solution has been proven, deals with both existing advertising brokers (Screenvision Cinema Network and National Cinema Network) as well as directly with national cinema chains offer another real revenue opportunity.

4/25/2002

Internal Machine Industries

Market Opportunities & Strategy

Entertainment

The most obvious market opportunities for a rich-media gaming and interactive multimedia platform for large venues are in the creation of new, innovative forms of entertainment. Business models are based on advertising and sponsorship fees, percentages of ticket and concession sales, fees for venue rental, gaming revenue and hardware and software sales, licensing and service. The flexibility of the Frequency 31 Interactive Engine gives Internal Machine the opportunity to explore new forms of interactive group entertainment to take advantage of our theater installations. Some ideas that have generated interest, both among the designers and venue owner/operators, are:

- Interactive, pre-movie game shows (see below).

- Sports trivia and "guess the next play" games during live sports broadcasts

- Private party/event programming entertainment (special games with themes dealing with marriage for wedding showers, children for baby showers, children's birthday parties, etc.)

- New forms of live entertainment (audience voting on "gong-show"-like presentations)

- New forms of interactive movies and interactive fiction

- Gambling/Bingo

We also have the opportunity to provide unique services to the theater itself, including integration with Point-Of-Sale systems to allow ordering of food and beverages with in-seat controllers. For theaters with waited service, concession sales (which account for the vast majority of theater revenue) drop sharply after the start of the movie because patrons can't get the attention of the waitstaff.

Finally, Frequency 31 has the capability to capture and report detailed statistics on system use, greatly assisting continuous improvement of each new experience.

Business

Because the Frequency 31 Interactive Engine can read, interpret and display Microsoft PowerPoint files, it is capable of displaying practically every business presentation. Combining this capability with rich media and interactivity yields market opportunities in large group teleconferencing, meeting facilitation, and event management. Business models include hardware and software sales, licensing and service, fees for venue and system rental and use, and custom interactive presentation design.

1

4/25/2002

Education, Certification and Training

Frequency 31 has many applications in education. Distance learning, education collaboration and real-time testing are all possible applications. Corporate and government-mandated certification programs could be made more effective, more engaging and more entertaining with the use of rich-media interactivity. Secure, reliable response gathering and reporting capabilities means that responses on tests and certification exams can be stored and used for scoring and certification. The platform also has possible uses in educational installations, including schools and museums. Business models most likely will center around hardware and software sales, licensing and service, as well as certification fees.

Market Research

The Frequency 31 Interactive Engine is an innovative way to gather, store, use and report audience feedback in real time. Certainly, market researchers can use the system to perform traditional polls of audiences. A more interesting possibility is to show, for example, a video that the researcher wants to evaluate and instruct audience members to record their responses as they watch. Frequency 31 can record the exact time during the presentation that the audience member responded, and researchers can see aggregate or individual audience response graphs in real time with the video in question. The Frequency 31 Controller's expansion port means that we can add other audience feedback collectors (like commonly-used response dials) as needed.

Growth & Innovation Strategy

Internal Machine's strategy is to stage a coordinated attack on each of these areas of market opportunity in such a way that business growth and technology innovation become co-fueling. The execution of this strategy occurs in three parts:

1. Pursue focused, profitable market opportunities, either independently or (preferably) with a business partner, using the platform's unique capabilities and advantages and the installed base of installations to win market share. Work closely with designers and partners to add new capabilities to make the resulting experiences unique and successful. Use each market opportunity as a chance to make fundamental improvements to the way that the market communicates to or gathers information from its audience.

2. Use the available experiences and the expanded platform advantages and capabilities to drive the number of installations aggressively. Take advantage of new venue capabilities and opportunities by adding features to the platform.

3. Use the expanded installation base and platform capabilities to fuel new market opportunities and partnerships.

Unlike other technology platform business models, which rely on a mixture of marketing

4/25/2002
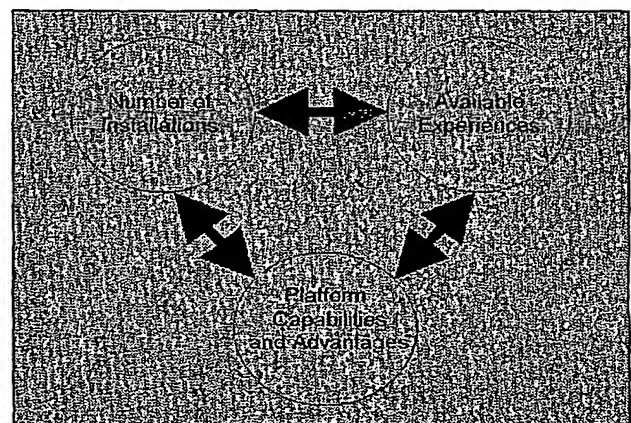
campaigns and luck in the pursuit of becoming a "standard" and reaching the critical mass necessary to support independent development efforts, Internal Machine's strategy is to build strength-on-strength while pursuing discrete, focused profit opportunities. Each incremental installation, platform improvement and new experience adds exponentially to both the value of the platform and to the momentum of business, revenue and innovation growth.

Execution Plan: Initial Experiences and Business Models

To execute this strategy, Internal Machine has identified four focused market opportunities. The first, Question Authority, secures (and funds) the first installation, sets a very high standard for platform capabilities and advantages, and sets the stage for future opportunities. The remaining three opportunities were chosen because they each have a business model that works for a single installation, take advantage of the existing capabilities of the Frequency 31 platform to offer a completely unique, innovative solution, and offer a chance to build relationships, knowledge and technology with respect to a new market segment.

After the launch of each new experience, Internal Machine will refuel its ongoing marketing campaign for new venues and installations. For example, with only Question Authority, the Drafthouse Theater in Austin wants to expand its existing relationship with Internal Machine to include its North location (with four additional screens), and we've generated interest from theaters in Dallas, San Antonio and Houston.

Sample Screens from Question Authority™
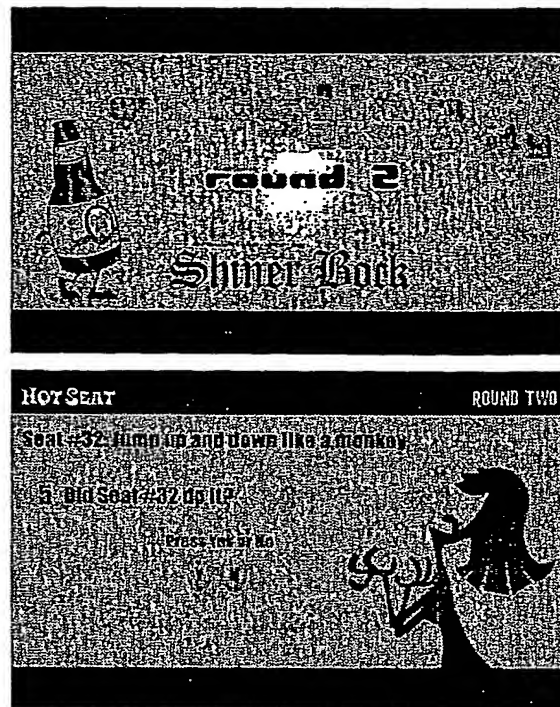
Entertainment: Question Authority (Advertising)

The first experience for the first Frequency 31 installation will be Question Authority, a 35 minute pre-movie game show that will be displayed at the Alamo Drafthouse Theater before every movie. The combination of the captive audience, rich media capabilities, and interactivity yield an outrageously ripe environment for advertising, and Question Authority's business model will be based on the integration of advertising and sponsorship messages with the presentation. (For a detailed treatment of our market research into the effectiveness of Question Authority's integrated advertising, see Appendix B.)

Question Authority is fully animated and makes use of the entire theater screen and Dolby surround sound. In addition, it uses real-time interactive capabilities to drive innovative audience participation. For example, the figure above shows an animated character playing "Truth or Dare" with the audience – the audience will vote on whether the participant should receive points for completing the dare.

According to the revenue stream predicted by our business model, Question Authority will produce cash flow that pays back all of the costs of design, production, engineering, installation and

3

maintenance fees of the first version of the Frequency 31 Interactive Engine within two years of operation.

Business: Frequency 31 Presentations and EM (Fees for Presentation Design, Use and Services)

Internal Machine is working with partner Advon Technologies (http://www.advontech.com) to use the Frequency 31 Interactive Engine for business presentations at its client's seminars and business events. Advon's clients include Gartner and IBM. The business model for Frequency 31 Presentations and EM (Event Management) appears in Appendix C [under development].

Education: Alamo DDD (Drafthouse Defensive Driving – Access Fees)

Internal Machine has initiated discussions with a design team to create Alamo DDD, a defensive driving school hosted by the Alamo Drafthouse. State-mandated minimum fees for defensive driving classes make the opportunity very lucrative. In addition, working with the design team to create the presentation will yield new educational capabilities that will translate easily into other governmental certification projects, corporate training applications and the classroom. The business model for Alamo DDD appears in Appendix D [under development].

Market Research: Frequency 31 Survey and PRM (Fees for Experiment Design, Use and Services)

A relatively straightforward extension of the current capabilities of the Frequency 31 platform is to allow market researchers to use installations to perform polls and surveys of audiences. Internal Machine has initiated discussions with market-leading market research firms to validate the business model contained in Appendix E. In addition, the Frequency 31 Controller's expansion port has yielded another interesting opportunity. Internal Machine is investigating the use of Physiological Response Measurement, or PRM, technology. With PRM, a finger cuff plugged into the expansion port of the Frequency 31 controller could record changes in an audience member's pulse rate, skin temperature and skin galvanic response, similar to the operation of a lie detector. By recording and reporting this data, market researchers could gather real-time, direct physiological evidence of the audience's emotional response.

Harvest & Exit Strategies

While it is very early to speculate on a final exit strategy for the company, a few possibilities deserve mention. First, Internal Machine's business and growth strategy open the door to an innovative possibility for multiple intermediate harvest opportunities. Second, even if public offering is not available as a final exit strategy, acquisition remains as an attractive option.

Experience Spin-off/Sale

Internal Machine will be in a position to independently (as in the case of Question Authority) or jointly fund efforts to take advantage of business opportunities made available by the Frequency 31 platform. Once the execution and launch of the effort is complete, an attractive possibility is to sell the resulting revenue stream to a company focused on its maximization. At first, the proceeds of such a sale might fund business expansion in lieu of a dilutive financing. Once the company is cash-

4

flow positive, however, such sales may afford a convenient and tax-advantageous vehicle for returning capital investment to shareholders.

Public Offering

Despite the state of the public equity markets, companies that own proprietary platforms that take advantage of focused business models earn respectable valuations. See Appendix F [under development] for a list of a few such companies.

Acquisition

Each market opportunity yields an opportunity to work with market leaders. By taking advantage of these relationships, and by conducting business and research in a manner consistent with acquisition, Internal Machine will ensure that it is an attractive acquisition target.

5

4/25/2002

Internal Machine Industries

Executive Summary

Internal Machine is building the Frequency 31 Interactive Engine, a rich-media gaming and interactive multimedia platform for large venues and groups. The first market focus for the platform is movie grill / screening room style movie theaters. That rapidly expanding market niche provides the perfect platform for exploitation of platform capabilities in other markets, including business events and presentations, education and certification, and market research.

- **The Market:**

    o There are currently over 250 movie cinemas in the United States that provide waited service during the movie. Most of these are independently-owned operations. Around 35% are owned by multi-theater chains or are associated with franchise operations. Industry insiders predict that this cinema niche will experience a 25% annual growth rate. In addition, major cinema operators (most notably General Cinemas (now owned by AMC), Regal and Lowes Cineplex) are dabbling with the concept, including opening experimental theaters or operating joint ventures with established movie grills.

    o 75% of the nation's 31,000 movie screens now show slide-show ads prior to the movie, and over half show full advertisements alongside previews. The revenue from ads shown at US chains (not counting slide show revenue) generates about $100 million annually.

    o Cinemas depend almost exclusively on concession sales for income. A measure of success often applied to theater management is concession sales per ticket sold. Over 80% of concession sales occur before the start of the movie.

- **The Product:** The Frequency 31 Interactive Engine consists of a display console and base station located in the projection booth, up to 500 ultra-durable controllers per console integrated into theater armrests, display and server software, and an API for interactive experience developers. The first interactive experience is Question Authority, a 35-minute pre-movie game show with integrated advertising.

    o *The perfect advertising medium.* The chart below shows how Question Authority compares with traditional forms of advertising, including pre-movie slide shows:
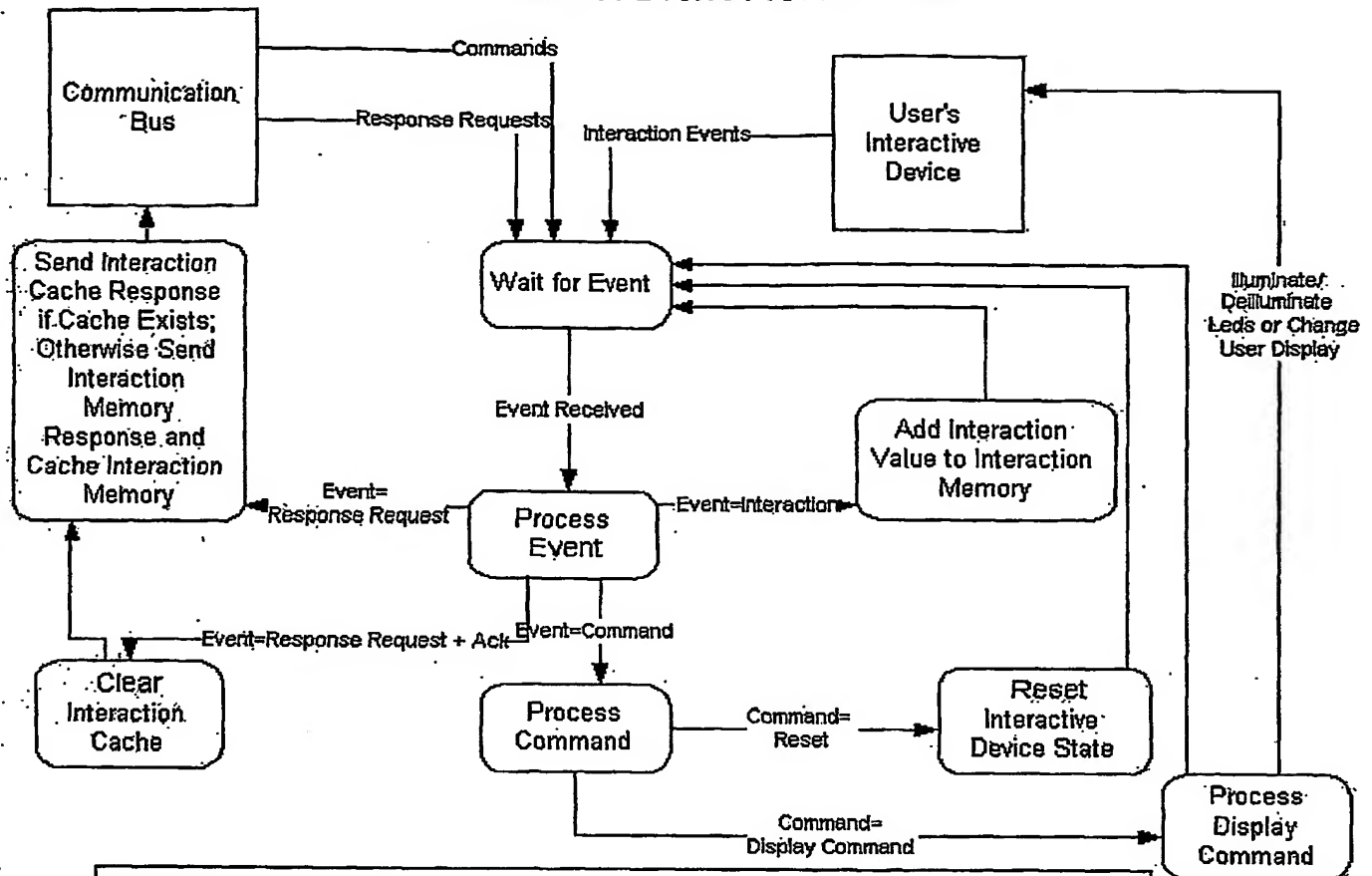
4/25/2002

	Captive Audience	Rich Media	Active Participants	Positive Advertising Reaction	Immediate Sale Capability	Multi-Vehicle, Multi-Campaign	Proof of Effectiveness
Question Authority	☑	☑	☑	☑	☑	☑	☑
TV		☑					
Radio		☑					
Newspaper/ Magazine			☑				
Internet Banner Ads		☑	☑				
Internet Email			☑				
FSI Coupons			☑				☑
POS Coupons			☑	☑	☑		☑
Direct Mail			☑		☑		☑
Movie Slide Shows	☑						

We estimate that with these advantages, Question Authority can demand up to 3-4 times the CPM of traditional slide show advertising.

o *Streamlined service to boost concession sales.* Each controller will be outfitted with a "service button" which will function exactly like the "call stewardess button" on an airplane, alerting the wait staff that a customer would like to order. In addition, the controller will have a one-touch beer button. The platform can also integrate with point of sale systems, offering the capability to order any item from your seat. With these advantages, we believe Frequency 31 can at least double post-movie-start concession sales, leading to at least a 20% revenue gain. In addition, theaters can charge premium advertising rates for "one-touch" vendors.

4/25/2002

Internal Machine Industries, Inc.
Confidential

Interactive Device Process Flow

```
Communication Bus ──Commands──┐
                  ──Response Requests──┐
                                       │   Interaction Events──→ User's Interactive Device
                                       ↓↓↓
                                   Wait for Event
                                       │
                                       │ Event Received
                                       ↓
Send Interaction Cache Response if Cache Exists; Otherwise Send Interaction Memory Response and Cache Interaction Memory

Event=Response Request ──→ Process Event ──Event=Interaction──→ Add Interaction Value to Interaction Memory

Event=Response Request + Ack    Event=Command

Clear Interaction Cache

Process Command ──Command=Reset──→ Reset Interactive Device State

Command=Display Command ──→ Process Display Command

Illuminate/Deilluminate Leds or Change User Display
```
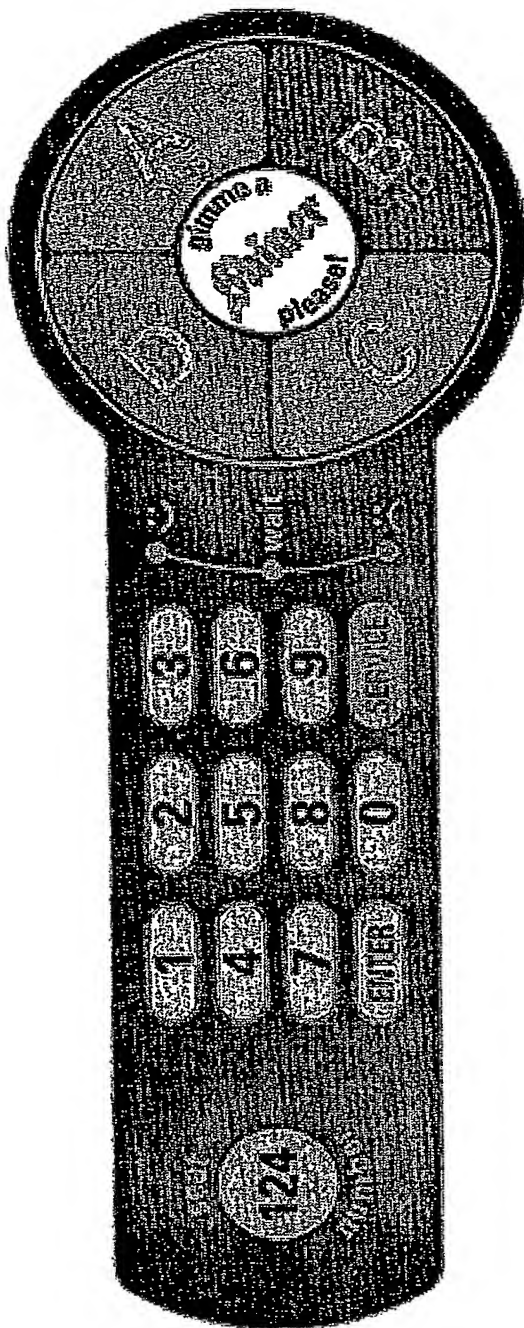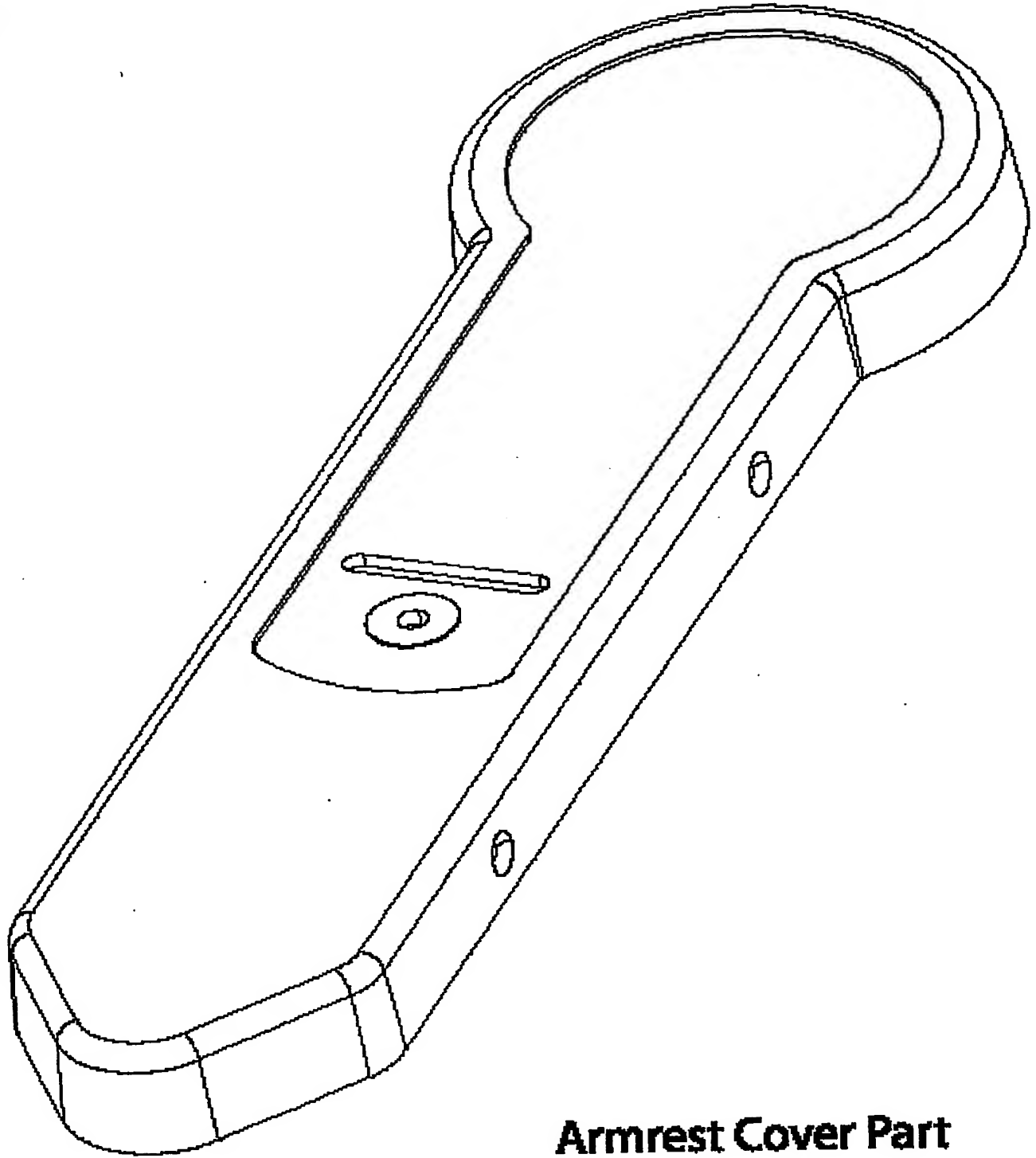
Notes:

1. The "Communication Bus" can be either a wire or a wireless frequency. Signals transmitted can use any wire or wireless protocol (e.g. RS-232, I2C, etc.)

2. The Response Request can either be addressed directly to the Interactive Device in question, or the Interactive Device may infer a Response Request based on other Communication Bus traffic. For example, if Interactive Devices are sequentially numbered, an Interactive Device may infer a Response Request from the response of a proximately numbered peer device. Response requests may also contain information to be forwarded to peer Interactive Devices (such as Response Requests or receipt acknowledgements).

3. The Interaction Cache Response and Interaction Memory Response may, in addition to user interaction information, may contain device status information, information to facilitate communication (such as relay path information), and information to trigger a Response Request inference (with or without a receipt acknowledgement) in a peer Interactive Device.

6037692&·050010&

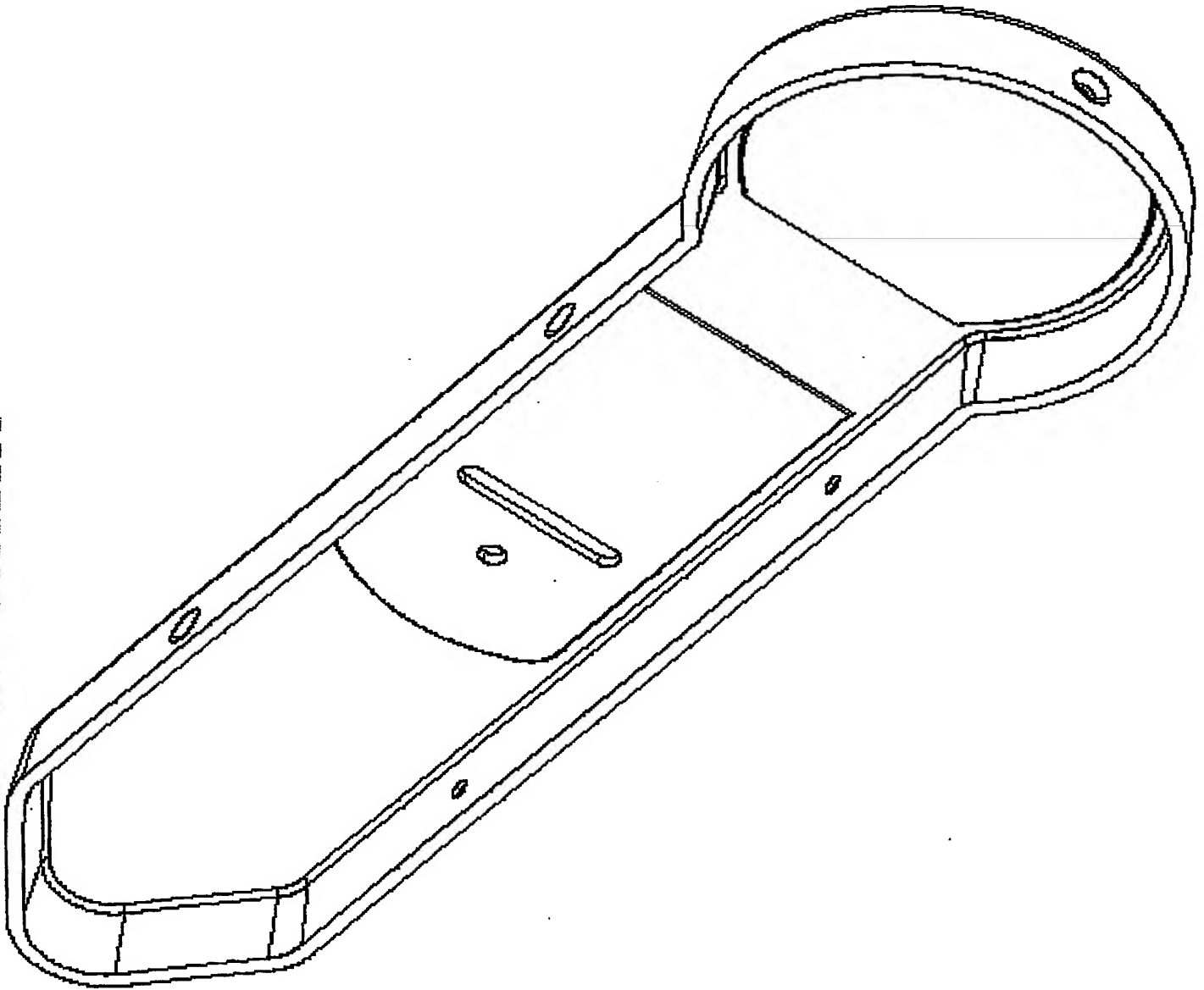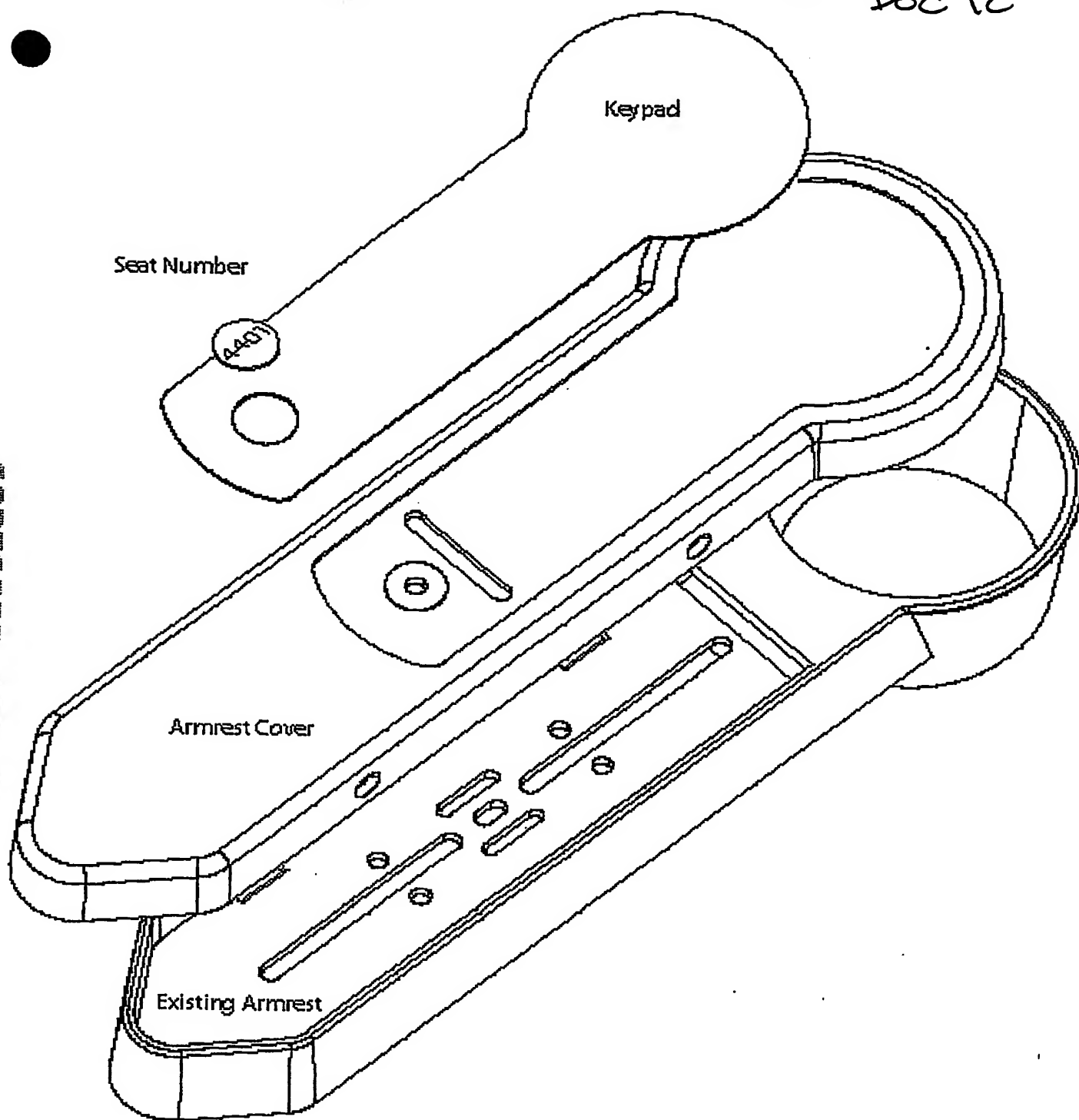**Armrest Cover Part**

Armrest Cover Bottom

Keypad

Seat Number

4401

Armrest Cover

Existing Armrest

Assembly

DOC 13

Keypad

Seat Number

4401

Armrest Cover

Existing Armrest

Battery
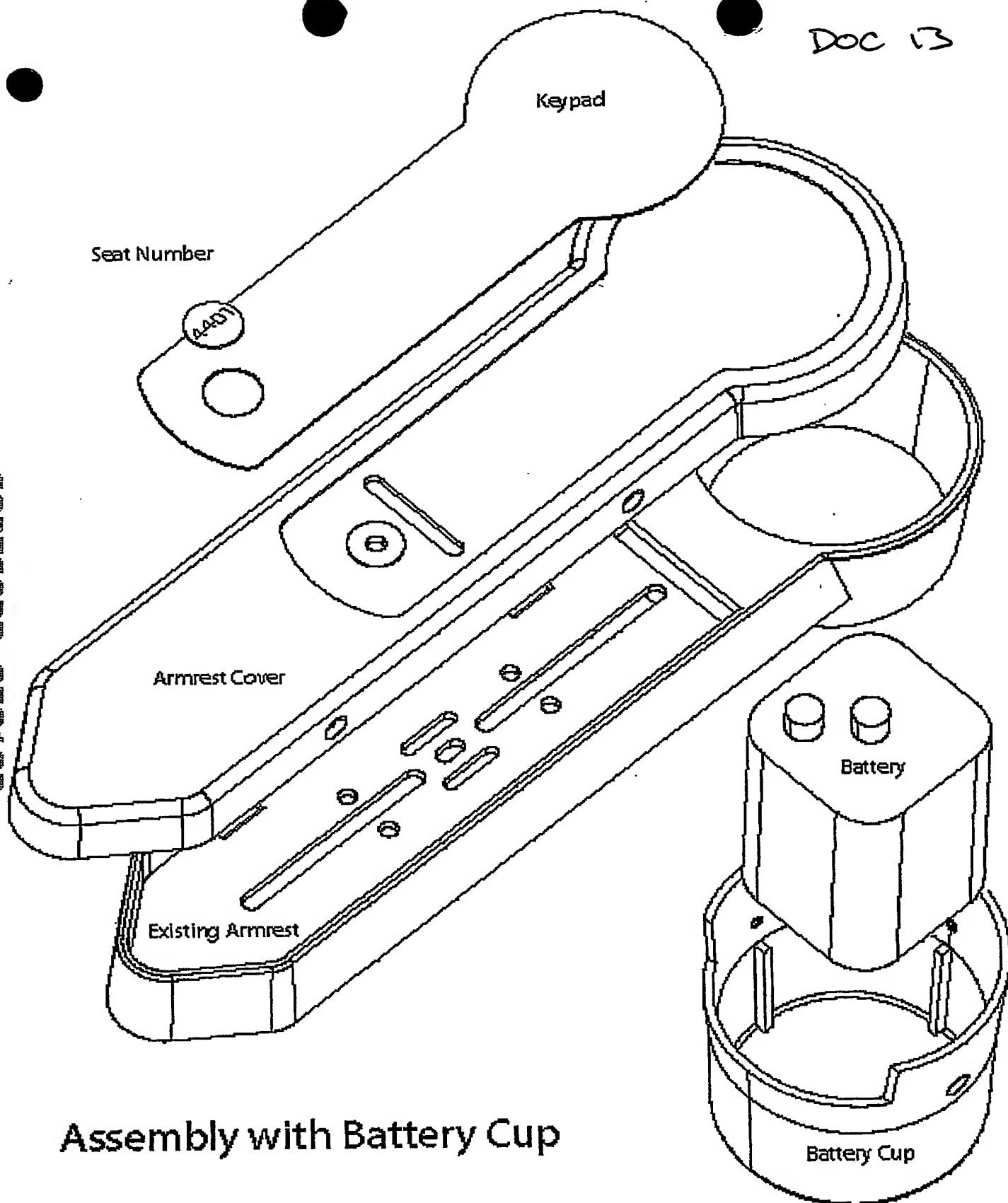
Battery Cup

Assembly with Battery Cup

6.039762EZ 050102

Game Response Scenario
(Quiz-Style Question with
Correct Answer)

Experience
Definition (.d91) File

Experience Engine

Display
(Projector) & Sound
System

Interactive
Device

Audience
Member

query

send
audience
question,
format, audio
and video
information

used
experience
display &
audio
information

transmit correct answer

prompt visually or audibly for response

enter
response

indicate
correct/
incorrect
answer

query

trigger on-
screen
response

transmit answer

provide visual/audible
response recognition

Time

20105073025' D50

Order Scenario

Lifelines: Waiter/Waitress | Point of Sale System | Lobby/Kitchen Touch Screen | Signal Box (on the dish) | Interactive Device | Audience Member

Messages (top to bottom):
- indicate service seat with LED
- initiate device with LED
- enter order / confirms order entry with display or LED
- transmit order
- transmit order
- identify location of interactive device and contents of order
- touch screen to confirm that order has been received
- confirm that order has been received
- confirm that order has been received with display or LED
- clear order
- deliver order
- turn off seat LED
- turn off seat LED / clear display

Time →

Interactive Experience / Movie Preview / Movie Start Scenario (Manual Start)

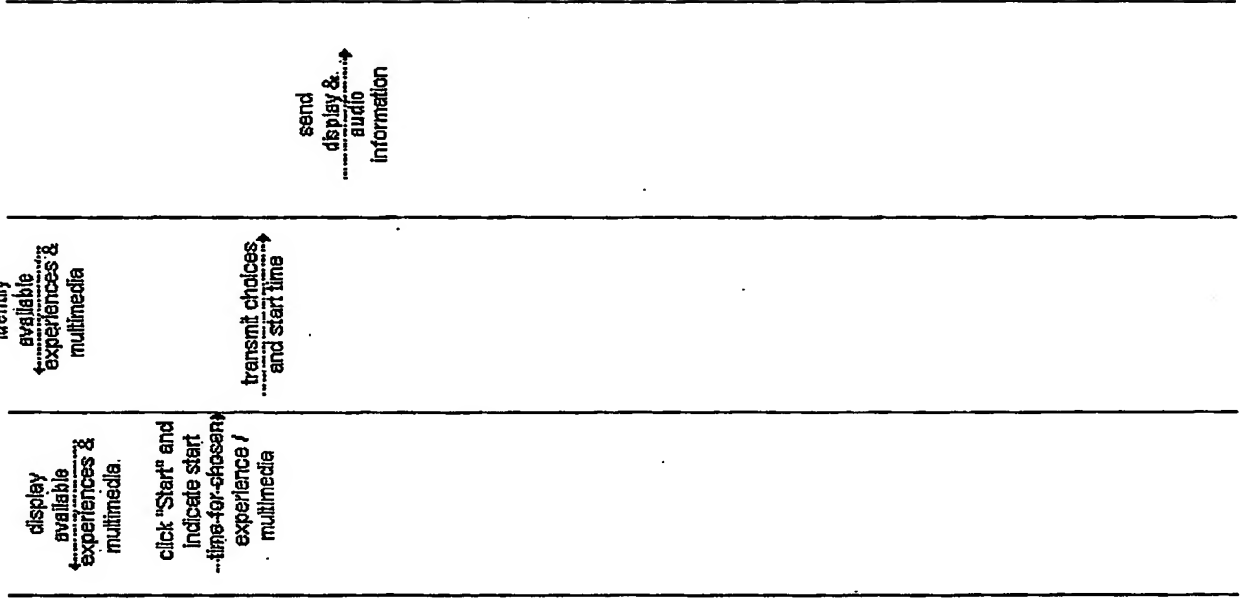| Projectionist / Administrator	Projection Booth Touch Screen	Console	Display (Projector) & Sound System
display available experiences & multimedia	identify available experiences & multimedia		
press "Start" and indicate start time for chosen experience / multimedia	transmit choices and start time		send display & audio information
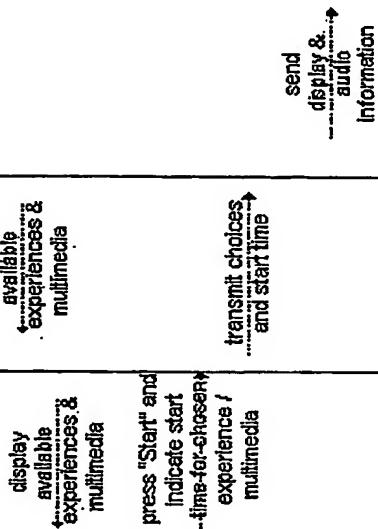
Time

Interactive Experience / Movie Preview / Movie Start Scenario (Remote Start)

Doc 17

Projectionist / Administrator

Administrator Web Interface

Console

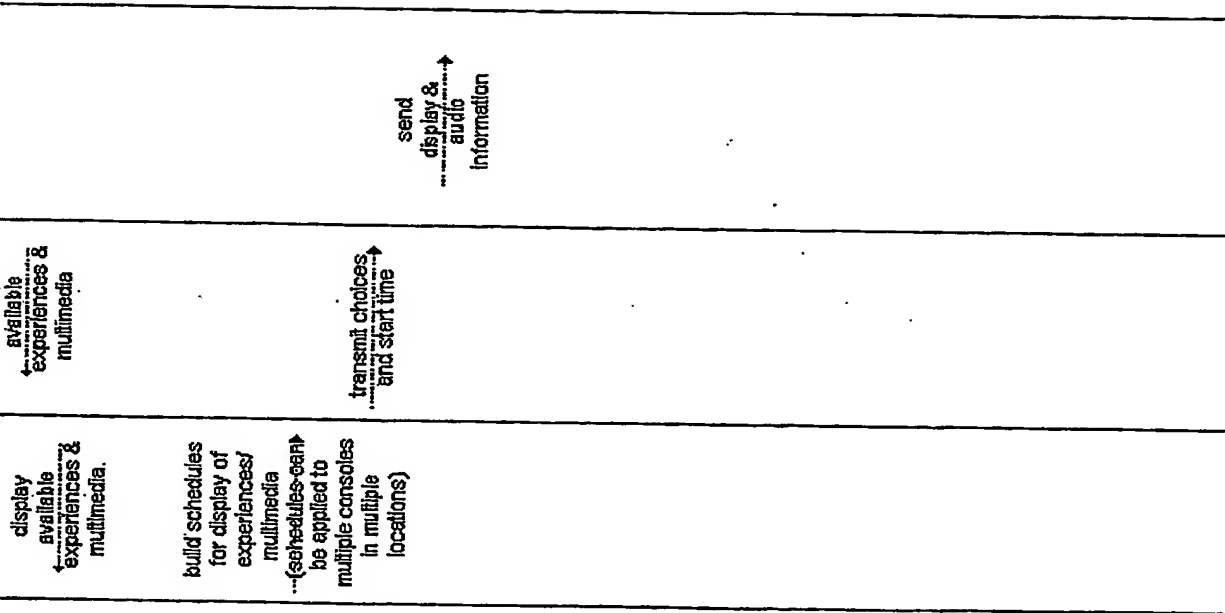Display (Projector) & Sound System

display available experiences & multimedia.

Identify available experiences & multimedia

click "Start" and indicate start --time-for-chosen experience / multimedia

transmit choices and start time

send display & audio information

Time

Interactive Experience / Movie
Preview / Movie Start
Scenario (Scheduled Start
Times)

DOC 18

BOTOSO" CCGGGFCS

Projectionist / Administrator	Administrator Web Interface	Console	Display (Projector) & Sound System

display available experiences & multimedia.

Identify available experiences & multimedia

build schedules for display of experiences/ multimedia ·····(schedules can be applied to multiple consoles in multiple locations)

transmit choices and start time

send display & audio information

Time

Experience Response Scenario

Experience Definition (.xml) File	Experience Engine	Display (Projector) & Sound System	Interactive Devices	Audience Member

send audio and video information, indicate request for response

send experience display & audio information

prompt visually or audibly for response

enter response

query

trigger on-screen response

provide visual/audible response recognition
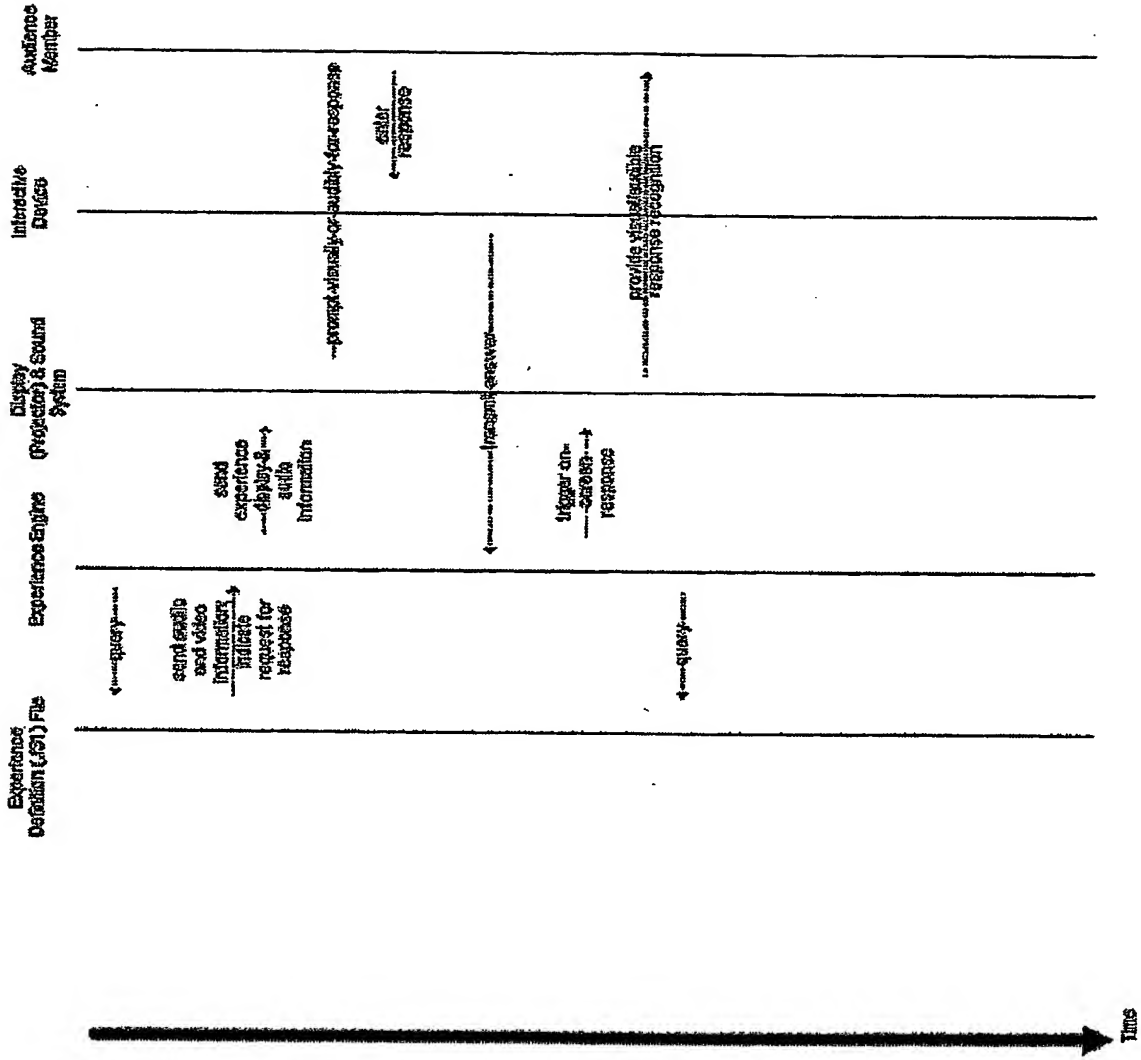
Time

Interactive Experience / Movie Preview / Multimedia Design and Upload Scenario

Dec 20

Experience / Multimedia Designer	Administrator Web Interface / FTP Location	Console
	present choices and wizards for designing .f31 files	
	build and save .f31 files	
	upload manually created .f31 files	
	prompt for needed/ missing multimedia assets	
	upload multimedia assets	
	request experience preview	
	send experience display & audio information	
	set options for security and availability	
		upload .f31 files and multimedia assets, make them available for display as appropriate

Time

United States Patent & Trademark Office
Office of Initial Patent Examination

Application papers not suitable for publication

SN __60376923__ Mail Date __05/01/07__

- ☐ Non-English Specification
- ☑ Specification contains drawing(s) on page(s) __✓__ or table(s)_____
- ☐ Landscape orientation of text ☐ Specification ☐ Claims ☐ Abstract
- ☐ Handwritten ☐ Specification ☐ Claims ☐ Abstract
- ☐ More than one column ☐ Specification ☐ Claims ☐ Abstract
- ☐ Improper line spacing ☐ Specification ☐ Claims ☐ Abstract
- ☐ Claims not on separate page(s)
- ☐ Abstract not on separate page(s)
- ☐ Improper paper size -- Must be either A4 (21 cm x 29.7 cm) or 8-1/2"x 11"
  - ☐ Specification page(s)_____ ☐ Abstract
  - ☐ Drawing page(s)_____ ☐ Claim(s)
- ☐ Improper margins
  - ☐ Specification page(s)_____ ☐ Abstract
  - ☐ Drawing page(s)_____ ☐ Claim(s)
- ☐ Not reproducible   Section
  - Reason   ☐ Specification page(s)_____
  - ☐ Paper too thin   ☐ Drawing page(s)_____
  - ☐ Glossy pages   ☐ Abstract
  - ☐ Non-white background ☐ Claim(s)
- ☐ Drawing objection(s)
  - ☐ Missing lead lines, drawing(s)_____
  - ☐ Line quality is too light, drawing(s)_____
  - ☐ More than 1 drawing and not numbered correctly
  - ☐ Non-English text, drawing(s)_____
  - ☐ Excessive text, drawing(s)_____
  - ☐ Photographs capable of illustration, drawing(s)_____